

Supporting Information for: *School gardening increases knowledge of primary school children on edible plants and preference for vegetables*

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## Contents

1. Figure S1: Percentages of students rating their preference for vegetables that they cannot identify and lack a preference for vegetables that they can identify.
2. Table S1: Overview of gardening interventions.
3. Table S2: Mean self-reported preference for vegetables.
4. Table S3: The degree to which students agree with given statements.
5. Table S4: Percentage of students that agreed with the statements.

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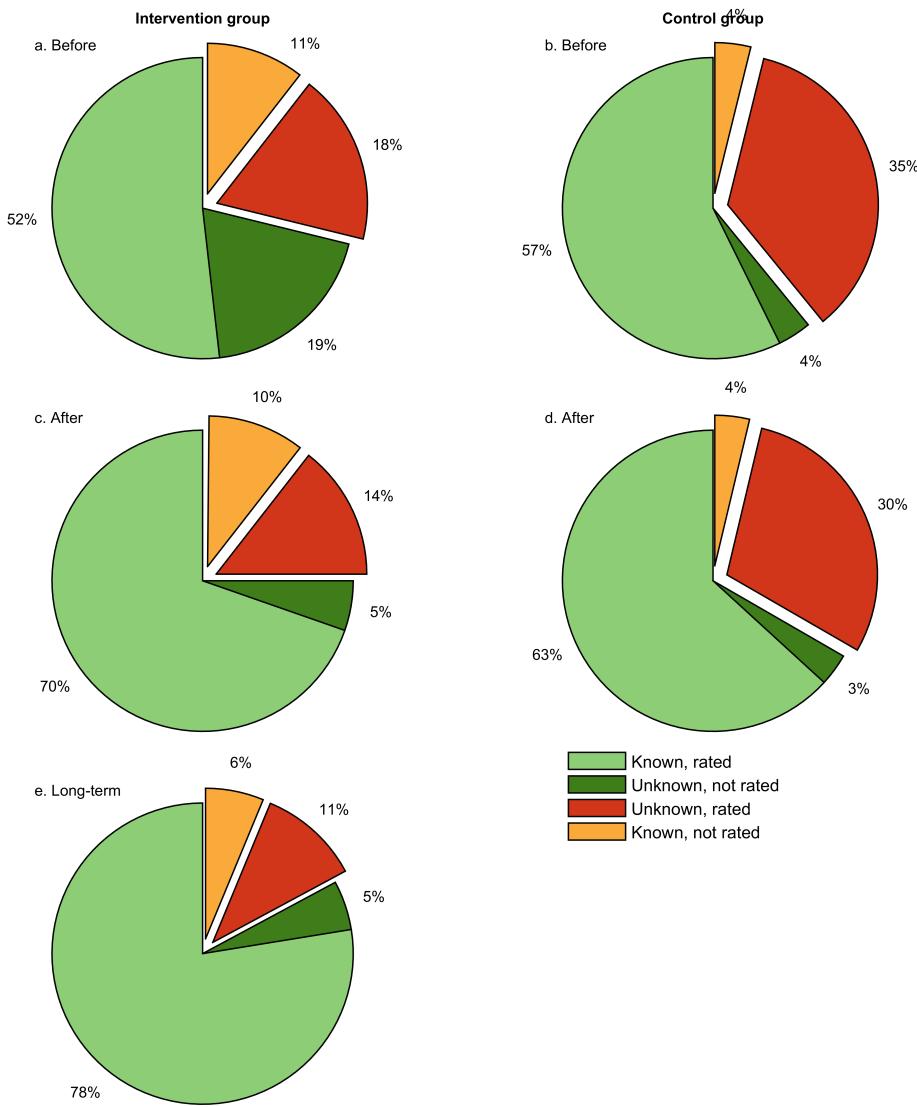


Figure 1: Percentages of students rating vegetables that they cannot identify and lack a self-reported preference rating for vegetables that they can identify, using summed measurements per group. The response per student for each vegetable was assigned one of the following categories: capable or incapable to identify the vegetable (known and unknown, respectively) and preference rating given or not given (rated and not rated, respectively).

Table 1: Overview of sample size, intervention duration and long-term monitoring of the effects, participant age and location of school gardening interventions.

Reference	n (interv)	t (interv)	long-term?	t (long-term)	Age (yr)	Continent	State or province	Comments
Davis et al. (2011)	34	12 weeks	No		9-11	North America	California (USA)	
Morris & Zidenberg-Cherr (2002)	81	17 weeks	Yes	6 months	9-10	North America	California (USA)	
Morgan et al. (2010)	35	10 weeks	Yes	4 months	11-12	Australia	New South Wales	
Wright & Rowell (2010)	234	3 weeks	No		5-11	North America	Wisconsin (USA)	No control
Ratcliffe et al. (2011)	170	17 weeks	No		11-13	North America	California (USA)	
Alexander et al. (1995)	30	n.a.	No		7-9	North America	Texas (USA)	
Hermann et al. (2006)	43	n.a.	No		8-14	North America	Oklahoma (USA)	Interviews only
Heim et al. (2009)	93	12 weeks	No		8-11	North America	Minnesota (USA)	
Farmer et al. (2009)	39	28 weeks	No		7-8	North America	Alabama (USA)	
Davis et al. (2016)	167	12 weeks	No		8-11	North America	California (USA)	
Lineberger & Zajicek (2000)	111	n.a.	No		8-11	North America	Texas (USA)	
Triador et al. (2015)	116	30 weeks	No		6-14	North America	Alberta (Canada)	
Nury et al. (2017)	45	35 weeks	No		9-10	Europe	The Netherlands	Observation and interviews
This study	150	30 weeks	Yes	1 year	10-12	Europe	The Netherlands	

n (interv) number of participants in gardening intervention; t (interv) duration of gardening intervention; long term? Yes if monitoring continues at least a month after intervention; t (long-term) duration until long-term monitoring, measured from the end of intervention period; n.a. not available

Table 2: Average self-reported preference for vegetables given on a scale of 1 to 7, including standard deviations. The preference of vegetables on average increased significantly more ( $P=0.05$ , non-parametric Wilcoxon signed-ranks test) in the intervention group compared to the control group.

Vegetable	Treatment group						Control group					
	Before (n=106)		After (n=106)		Long-term (n=52)		Before (n=65)		After (n=65)			
	$\mu$	$\sigma$	$\mu$	$\sigma$	$\mu$	$\sigma$	$\mu$	$\sigma$	$\mu$	$\sigma$		
Lettuce	5.4	1.5	5.5	1.4	5.5	1.0	5.6	1.3	5.3	1.5		
Beetroot	3.5	2.0	4.0	1.9	4.0	1.9	3.9	2.1	3.9	2.0		
Zucchini	4.0	2.0	3.8	2.1	3.6	2.0	4.3	2.1	4.3	2.1		
Sugar snaps	4.5	1.8	4.4	1.8	4.2	2.0	5.1	1.9	4.3	2.2		
Pumpkin	3.7	2.1	4.0	2.1	4.1	1.8	3.6	2.4	3.7	2.1		
Cress	5.2	1.6	5.2	1.9	5.0	1.5	4.3	2.1	4.1	1.9		
Rucola	4.9	1.8	4.7	1.5	4.3	1.6	4.9	2.0	4.1	2.0		
Radish	3.7	1.9	3.9	2.0	3.8	1.7	3.7	2.0	3.4	1.6		
Potato	5.9	1.4	5.9	1.4	6.0	1.5	5.9	1.3	5.8	1.3		
Spinach	5.6	1.8	5.2	1.9	5.6	2.0	4.8	2.3	4.9	2.3		
Green bean	4.8	1.9	4.9	1.8	4.7	1.9	5.1	2.2	4.8	2.0		
Union	4.1	2.0	4.2	2.0	4.3	1.9	4.1	2.0	3.8	2.0		
Tomato	4.8	2.3	4.7	2.3	5.4	2.1	4.6	2.2	4.6	2.1		
Carrot	5.4	1.9	5.8	1.6	5.9	1.4	5.4	1.9	5.6	1.4		

Table 3: Mean ( $\mu$ ) and standard deviation ( $\sigma$ ) for the degree to which students agree with the given statements on a scale of 1 (strongly disagree) to 5 (strongly agree).

Statement	Treatment group						Control group					
	Before (n=106)		After (n=106)		P		Before (n=52)		After (n=65)		P	
	$\mu$	$\sigma$	$\mu$	$\sigma$	P	$\mu$	$\sigma$	P	$\mu$	$\sigma$	P	
I like vegetables	4.1	1.0	4.1	0.9	0.50	4.1	0.9	0.11	3.9	1.3	3.8	1.2 0.50
I like to garden	4.3	1.0	3.9	1.2	1.00	3.4	1.3	1.00	3.5	1.5	3.3	1.5 0.76
I like to go outside	4.6	0.7	4.6	0.7	0.50	4.4	0.8	0.80	4.0	1.5	3.8	1.5 0.76
I only eat vegetables I know	2.6	1.4	2.6	1.3	0.50	2.7	1.3	0.07	2.8	1.6	2.7	1.7 0.69

Table 4: Percentage of students that agreed with the statements. The asterisks (\*) indicate a significant decrease in students that agreed with the statements, compared to before the intervention. Other changes and difference between control and intervention group where not significant.

Statement	Treatment group			Control group	
	Before (%)	After (%)	Long-term (%)	Before (%)	After (%)
I help with cooking at home	84	87	90	85	83
I would like to have my own garden at home	98	83*	67*	73	72
I help more often in the garden at home now		42	41		
I cooked with the vegetables at home		85			
I went to the schoolgarden outside class hours		35			
I would like to do the gardening project again		87			